

TABLE 3.—Maximum free-air wind velocities, (m. p. s.), for different sections of the United States, based on pilot-balloon observations during December, 1943

Section	Surface to 2,500 meters (m. s. l.)					Above 2,500 to 5,000 meters (m. s. l.)					Above 5,000 meters (m. s. l.)				
	Max. velocity	Direction	Altitude (m.) m. s. l.	Date	Station	Max. velocity	Direction	Altitude (m.) m. s. l.	Date	Station	Max. velocity	Direction	Altitude (m.) m. s. l.	Date	Station
Northeast ¹	51.2	NW.	2,080	28	Hartford, Conn.	57.5	WNW.	4,600	5	Boston, Mass.	64.8	WSW.	8,060	15	Phillipsburg, Pa.
East Central ²	47.6	NW.	1,800	11	Greensboro, N. C.	58.8	W.	4,780	13	Norfolk, Va.	82.0	WSW.	9,350	15	Huntington, W. Va.
Southeast ³	32.1	WNW.	2,420	12	Atlanta, Ga.	39.3	WNW.	4,960	22	Charleston, S. C.	57.0	WSW.	16,280	14	Miami, Fla.
North Central ⁴	52.2	NNW.	1,610	19	Duluth, Minn.	50.0	NW.	4,920	11	Bismarck, N. Dak.	65.0	W.	11,770	9	Bismarck, N. Dak.
Central ⁵	40.0	WNW.	2,440	11	Moline, Ill.	53.6	NW.	4,770	10	Joliet, Ill.	71.6	WNW.	11,140	28	Wichita, Kans.
South Central ⁶	35.6	WNW.	2,100	31	Tulsa, Okla.	40.0	SW.	4,360	27	Del Rio, Tex.	68.0	W.	<div><div>10,060</div><div>11,200</div></div>	30	Big Spring, Tex.
Northwest ⁷	42.0	W.	2,480	3	Havre, Mont.	54.0	NNW.	5,000	8	Burns, Oreg.	84.6	NNW.	6,760	8	Burns, Oreg.
West Central ⁸	35.4	NE.	2,080	9	Sacramento, Calif.	44.6	SE.	3,520	16	Oakland, Calif.	80.7	ENE.	9,230	9	Winnemucca, Nev.
Southwest ⁹	33.1	E.	1,850	9	Albuquerque, N. Mex.	44.2	W.	4,370	7	Raton, N. Mex.	63.0	W.	10,280	29	Las Vegas, Nev.

¹ Maine, Vermont, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, and northern Ohio.

² Delaware, Maryland, Virginia, West Virginia, southern Ohio, Kentucky, eastern Tennessee, and North Carolina.

³ South Carolina, Georgia, Florida, and Alabama.

⁴ Michigan, Wisconsin, Minnesota, North Dakota, and South Dakota.

⁵ Indiana, Illinois, Iowa, Nebraska, Kansas, and Missouri.

⁶ Mississippi, Arkansas, Louisiana, Oklahoma, Texas (except El Paso), and western Tennessee.

⁷ Montana, Idaho, Washington, and Oregon.

⁸ Wyoming, Colorado, Utah, northern Nevada, and northern California.

⁹ Southern California, southern Nevada, Arizona, New Mexico, and extreme west Texas.

TABLE 3.—Maximum free-air wind velocities (m. p. s.) for different sections of the United States, based on pilot-balloon observations during year 1943

Section	Surface to 2,500 meters (m. s. l.)					Above 2,500 to 5,000 meters (m. s. l.)					Above 5,000 meters (m. s. l.)				
	Max. velocity	Direction	Altitude (m) m. s. l.	Date	Station	Max. velocity	Direction	Altitude (m) m. s. l.	Date	Station	Max. velocity	Direction	Altitude (m) m. s. l.	Date	Station
Northeast ¹	60.0	W.	2,290	Apr. 28	Phillipsburg, Pa.	57.5	WNW.	4,600	Dec. 5	Boston, Mass.	90.5	W.	13,550	Jan. 29	Portland, Maine.
East Central ²	47.6	NW.	1,800	Dec. 11	Greensboro, N. C.	62.4	W.	5,000	Jan. 4	Greensboro, N. C.	82.0	WSW.	9,350	Dec. 15	Huntington, W. Va.
Southeast ³	41.3	NW.	1,050	Feb. 14	Spartanburg, S. C.	58.0	W.	4,960	Feb. 14	Charleston, S. C.	66.0	W.	11,900	Feb. 7	Miami, Fla.
North Central ⁴	52.2	NNW.	1,610	Dec. 19	Duluth, Minn.	62.9	WNW.	5,000	Mar. 28	International Falls, Minn.	73.8	WNW.	12,420	Nov. 20	Detroit, Mich.
Central ⁵	62.0	SSW.	2,380	Mar. 30		Dodge City, Kans.	54.4	W.	2,550	Mar. 17	Des Moines, Iowa	75.2	WNW.	14,700	Jan. 10
South Central ⁶	52.4	NW.	1,380	Apr. 13	Tulsa, Okla.	55.3	NW.	5,000	Feb. 6	Waco, Tex.	113.0	SW.	17,090	Jan. 23	Amarillo, Tex.
Northwest ⁷	64.6	S.	1,210	Oct. 24	Tatoosh Island, Wash.	60.0	WNW.	3,700	Jan. 15	Burns, Oreg.	84.6	NNW.	6,760	Dec. 8	Burns, Oreg.
West Central ⁸	60.8	W.	2,480	Jan. 20	Cheyenne, Wyo.	67.0	WNW.	4,700	Jan. 15	Ely, Nev.	80.7	ENE.	9,230	Dec. 9	Winnemucca, Nev.
Southwest ⁹	48.2	SW.	2,290	Mar. 18	Winslow, Ariz.	62.0	W.	4,800	Mar. 15	Roswell, N. Mex.	85.0	WSW.	9,110	Apr. 12	El Paso, Tex.

¹ Maine, Vermont, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, and northern Ohio.

² Delaware, Maryland, Virginia, West Virginia, southern Ohio, Kentucky, eastern Tennessee, and North Carolina.

³ South Carolina, Georgia, Florida, and Alabama.

⁴ Michigan, Wisconsin, Minnesota, North Dakota, and South Dakota.

⁵ Indiana, Illinois, Iowa, Nebraska, Kansas, and Missouri.

⁶ Mississippi, Arkansas, Louisiana, Oklahoma, Texas (except El Paso), and western Tennessee.

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⁹ Southern California, southern Nevada, Arizona, New Mexico, and extreme west Texas.

RIVER STAGES AND FLOODS

By C. R. JORDAN

PRECIPITATION during December 1943, was below normal over most of the northern and eastern parts of the country except locally in the South Atlantic States. On the Pacific coast normal conditions were completely reversed. Seattle, Wash., with a normal of 5.60 inches, received 1.27 inches, while San Diego, Calif., with a normal of 1.87 had 7.60 inches. Seattle had the driest December of record while the 7.60 inches at San Diego has been exceeded only twice in more than 90 years.

The seasonal snow cover had accumulated at the end of December to considerable depths in northern New England, in the Adirondacks, northern Michigan, and in the Rocky Mountains and western coastal ranges. Some of the greater depths in the Far West were 30 inches at Cumbres, Colo.; 41 inches at Silver Lake, Utah; 72 inches at Paradise Inn, Wash.; and 31 inches at Huntington Lake, Calif.

Conditions were extremely unfavorable for the maintenance of stream flow and ground-water levels. Stream flow was below normal in more than 80 percent of the

country. December was the fourth consecutive month with no flooding of consequence. The Saluda River just reached flood stage at Pelzer, S. C., on December 27, and the Luckiamute River rose to a stage of 26.4 feet, 1.4 feet above flood stage, at Suver, Oreg., on December 5, as a result of moderately heavy rain along the northern Pacific coast on December 3-4. No damage resulted at either place.

FLOOD-STAGE REPORT FOR DECEMBER 1943

[All dates in December]

River and station	Flood stage	Above flood stages—dates		Crest	
		From—	To—	Stage	Date
ATLANTIC SLOPE DRAINAGE	<i>Feet</i>			<i>Feet</i>	
Saluda: Pelzer, S. C.-----	6	27	27	6	27
PACIFIC SLOPE DRAINAGE					
<i>Columbia Basin</i>					
Luckiamute: Suver, Oreg.-----	25	4	5	26.4	5